## This Page Is Inserted by IFW Operations and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

## WHAT IS CLAIMED IS:

5

10

15

25

 A planar light source device, comprising: a plurality of light sources emitting different colors of light; and

a light guide plate receiving light from the plurality of light sources at a side face to distribute the light over a surface thereof;

wherein a light emission angle differs among the plurality of light sources.

- 2. A planar light source device according to Claim 1, comprising a refractor mounted on an emission surface of each of the plurality of light sources for changing a direction of light, the refractor having a different shape for the different light sources.
- 3. A planar light source device according to Claim 1, wherein a light emission angle of a light source of the plurality of light sources emitting longer wavelength light is smaller than a light emission angle of a light source of the plurality of light sources emitting shorter wavelength light.

4. A planar light source according to Claim 1,

wherein the plurality of light sources are red, green, and blue light emitting diodes.

5. A liquid crystal display device, comprising:

5

10

15

20

25

a planar light source device according to Claim 1; and

a liquid crystal panel placed above an emission surface of the planar light source, the liquid crystal panel having two substrates with a liquid crystal layer interposed therebetween.

6. A liquid crystal display device according to Claim 5, wherein the different light sources have different light emission angles in order that wavelength dependence of transmittance at a viewing direction in the liquid crystal panel is canceled out by wavelength dependence of luminance at the viewing direction in the planar light source device.

7. A planar light source device, comprising: a plurality of light sources emitting different colors of light;

a light guide plate receiving light from the plurality of light sources at side face to distribute the light over a surface thereof; and

a refractor refracting light from the plurality of light sources with different refraction angles for different colors.

5

8. A planar light source device according to Claim 7, wherein the refractor is formed on a side face of the light guide plate facing the plurality of light sources, the refractor having a different shape for the different light sources.

10

15

9. A planar light source device according to Claim 7, further comprising a prism plate mounted between the plurality of light sources and the light guide plate, wherein the refractor is formed on a side face of the prism plate facing the plurality of light sources, the refractor having a different shape for the different light sources.

20

10. A planar light source device according to Claim 7, wherein a refraction angle of longer wavelength light is smaller than a refraction angle of shorter wavelength light.

25

11. A planar light source according to Claim
7, wherein the plurality of light sources are red,
green, and blue light emitting diodes.

12. A liquid crystal display device, comprising:

a planar light source device according to Claim 7; and

a liquid crystal panel placed above an emission surface of the planar light source, the liquid crystal panel having two substrates with a liquid crystal layer interposed therebetween.

10

15

20

25

5

- 13. A liquid crystal display device according to Claim 12, wherein the different light sources have different light emission angles in order that wavelength dependence of transmittance at a viewing direction in the liquid crystal panel is canceled out by wavelength dependence of luminance at the viewing direction in the planar light source device.
  - 14. A planar light source device, comprising:
  - a light source;
- a light guide plate receiving light from the plurality of light sources at a side face to distribute the light over a surface thereof; and
- a hologram diffracting different light at different angles.

- 15. A planar light source device according to Claim 14, wherein the hologram is placed between the light source and the light guide plate.
- 5 16. A planar light source device according to Claim 14, wherein the hologram is placed above an emission surface of the light guide plate.
- 17. A planar light source device according to

  10 Claim 14, wherein the hologram diffracts longer wavelength light at an angle while diffracts shorter wavelength light at a larger angle than the angle of the longer wavelength light.
- 18. A liquid crystal display device, comprising:
  - a planar light source device according to Claim
    14; and
- a liquid crystal panel placed above an emission surface of the planar light source, the liquid crystal panel having two substrates with a liquid crystal layer interposed therebetween.
- 19. A liquid crystal display device according to Claim 18, wherein the hologram is arranged in order that wavelength dependence of transmittance at a

viewing direction in the liquid crystal panel is canceled out by wavelength dependence of luminance at the viewing direction in the planar light source device.